REPORT

OF A

CASE OF PREGNANCY IN THE RIGHT HORN OF A UTERUS BICORNIS,

TREATED SUCCESSFULLY BY A

MODIFIED CÆSAREAN OPERATION, TWELVE MONTHS AFTER THE DEATH OF THE CHILD AT THE FULL TERM OF GESTATION: SO-CALLED "MISSED LABOR."

BY

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REPORT OF A CASE OF PREGNANCY IN THE RIGHT HORN OF A UTERUS BICORNIS,

Treated Successfully by a Modified Cæsarean Operation, Twelve Months after the Death of the Child at the Full Term of Gestation: So-called "Missed Labor."

By B. F. Baer, M.D.,
Philadelphia.

The case whose history is here related is one of unusual interest, and in some of its features probably unique.

On June 11, 1885, I was consulted by Mrs. L. O. She had been sent to me by Dr. G. D. Nutt, of Williamsport, Pa., who had diagnosticated extra-uterine pregnancy. She was then twenty-six years of age and had been married four years. She had one child a year after marriage, at the full term, after a normal labor. The child died when three months of age from cholera infantum. She then menstruated regularly until about September 1, 1883, after which time the catamenia were suppressed and she considered herself pregnant. In due time the morning nausea and vomiting, mammary signs, abdominal enlargement, quickening, and all of the other signs of normal pregnancy occurred in regular order. The abdomen continued to increase in size until she was as large as at full term, but the enlargement was greater on the right side than on the left. Fœtal movements were active and strong, but did not impress the patient as unusual. She did not have the slightest hemorrhagic discharge from the uterus, nor did she suffer any pain during the entire course of the gestation. She did not have a

suspicion but that she was normally pregnant, and she anticipated a normal labor as with the first pregnancy. During the first week of June, 1884, when she was about the full term, and hourly expecting to go into labor, she was attacked with sharp pain in the right side of the abdomen; she felt something give way, and the movements of the child, which had been unusually active, suddenly ceased. She became faint for a time, but soon rallied, and there was no further evidence of shock. Labor pains began almost simultaneously with these phenomena, and she sent for a physician, Dr. J. W. Sheets, of Northumberland, Pa., who kindly sent the following reply to a letter which I addressed to him after the patient came under my care, and which I received on the day of the operation.

"My dear Doctor: Yours of the fourteenth instant received. On June 9, 1884, I was called to see Mrs. O. for the first time. She had been in the care of another physician of this place during what he and she supposed to be the later stages of natural pregnancy. For some reason the family became dissatisfied with him and sent for me. I found her losing a great deal of blood from the vagina, and suffering from pain in the region of the uterus. Examination revealed what appeared to be a dilatable os, but rather of eight and a half months than full term. I ordered quiet and opium, and the next day found the patient easy but still losing blood. I now examined her more closely. She had the appearance of a healthy person in the last month of utero-gestation. The fœtal heart sounds were strong and apparently natural—at least, I was satisfied such was the case at the time. The next day, the third from the time I first saw her, she was up and assisting her husband with some light duties in his bakery. I did not have an opportunity to examine her thoroughly after that. There seemed an unusual condition, but her freedom from all peculiar symptoms until what I considered near the full term of gestation, and the natural appearance externally, led me to advise her to await development for a short time. The second week the husband called to pay me, saying, 'we move tomorrow.' This was June 23. They moved to Towanda, Pa., and several months afterward I received a letter from a physician attending her, in which he stated his conviction that Mrs. O. was the subject of an abdominal growth. I persisted in the presence of a fœtus, and if not in the uterine cavity it must be otherwise, but I was sure of a fœtus. I looked upon her case as one presenting very exceptional features. Nearly as I could ascertain, all through her pregnancy she presented no unusual

symptoms, and only within a short time of what seemed to be the full term did she present any, and they not remarkable.

"Very truly yours,

(Signed.) "J. W. SHEETS."

The patient further stated that within a few days after the false labor in June the mammary glands became swollen and tense and milk was secreted; but it soon disappeared and the glands returned to the non-pregnant condition. The abdominal tumor began to diminish in size. In the meantime she was in comparatively good health, and had removed (as stated by Dr. Sheets) to a distant town. In the first week of July, just one month from the commencement of the symptoms described above, labor-like pains and metrorrhagia again set in, and the physician who was now called thought she was in labor. He said that the child had probably died in June, and that "missed labor" had occurred, but that the contents of the uterus would now be expelled. After two or three days, however, the pains and hemorrhage subsided and the patient went about.

The next month, and the next, "hard labor pains" occurred with the recurrence of the menses, and each time both the patient and her physician looked for the delivery of the product of the "missed labor." They were disappointed. But the tumor was becoming gradually smaller and more firm. At the fifth recurring menstrual period from the beginning of the trouble in June, labor pains were absent and she had a natural menstruation. It was at this time that her physician was so puzzled that he wrote to Dr. Sheets his belief that Mrs. O. had an abdominal tumor (non-pregnant). After this the catamenia occurred regularly, but the expulsive pains did not return. She was about, attending to her duties, but she gradually lost strength and flesh. A few weeks before she came under my care she was suddenly attacked, at midnight, by a sharp pain in the right hypogastric region, followed after a time by a fainting sensation and then cold (shock). She continued ill the remainder of the night and the forenoon of the next day, when she felt better; but the symptoms returned the following night, and every night subsequently, at about the same time, and continued as with the first attack. The pain also extended to the back and

down the right groin and anterior portion of the thigh. The patient presented a considerably emaciated and pallid appearance.

Inspection.—Patient in the dorsal position. The right side and centre of the abdomen were shown to be distended by a mass as large as the uterus at the seventh month of gestation. It was pyramidal in shape, larger above than below. The abdominal wall presented a dry, drawn, emaciated appearance. The iliac processes were very prominent. There was a wide, deep sulcus into which the hand could be laid between the left superior iliac spine and the tumor. A depression also existed between the right anterior iliac prominence and the tumor, but it was much smaller. The lower anterior surface extended downward and rested upon the right pubic ramus, apparently dipping into the pelvic cavity.

Palpation.—The upper portion of the tumor was easily movable from side to side in the abdominal cavity, but the lower portion seemed to have a deep pelvic attachment. It was smooth on the surface and appeared to be entirely free from the abdominal wall. It was firm, almost hard, and this fact, taken in connection with its smoothness and mobility, suggested uterine fibroid. Vaginal palpation showed that the uterus was elevated and placed somewhat diagonally across the pelvis, the cervix pointing downward and to the right, the fundus upward and to the left, the organ being apparently suspended from the tumor to which it was *loosely* attached. The uterus was unusually small and could be moved to a limited degree independently of the tumor, as though it had a broad-ligament attachment. A broad, ligamentous attachment could almost certainly be made out by bi-manual palpation. The cervix and os were quite small; the sound gave a measurement of two inches and a half, and showed the uterine cavity to be small; the uterus was apparently more cylindrical than flat. The lower surface of the tumor could be felt very distinctly by the vaginal finger. It was smooth, globular, and semi-fluctuating. There was dulness on percussion over the tumor; resonance on the lateral and upper borders.

Diagnosis.—The question of diagnosis became a very interesting one. It was clear that some form of ectopic gestation had existed. But it was also clear that it had not been of the ordinary

tubal variety of extra-uterine pregnancy, since the patient had not had any of the symptoms of rupture of the gestation sac, as pain, hemorrhage, discharge of decidua, shock, etc , which always attend that accident. The so-called abdominal gestation was also excluded for the same reason; for it is now a well-established belief that when this form of extra-uterine gestation exists, which is rare, it begins as a tubal pregnancy. The tube ruptures and the embryo escapes, either into the abdominal cavity, where it probably dies, or into the broad ligament, where it may go on developing. The symptoms of rupture of the tube are, therefore, always present in these cases in a greater or less degree. Further, as the external covering is destroyed when the tube ruptures into the abdominal cavity, the chorion is without protection. Nature, therefore, imperfectly supplies this, if the product lives, by forming an adventitious inflammatory sac to which the chorion becomes attached. The gestation under these circumstances is always attended with great suffering to the mother, if indeed she escapes with her life. And if full term is reached, the phenomena of labor do not occur and recur so perfectly as were here manifested. Again, when an inflammatory sac has been formed it is always closely adherent to the organs and tissues around it and to the uterus; therefore, the physical signs would be entirely different from those present in this case. There would not be the mobility of the womb, nor a non-inflammatory and apparently ligamentous attachment as was found here.

In view of the history and physical signs related above, I concluded that some form of abnormal pregnancy had existed and that the tumor contained a dead child; but I was puzzled as to the character of the sac. It could not have been tubal and reached term, as it did, without symptoms of rupture. It could not have been intraligamentous and reached term without having given rise to symptoms and physical signs, which were absent in this case. There was no doubt, however, as to the proper course of treatment. I advised laparotomy, and hoped, in view of the transverse mobility of the upper portion of the tumor, to be able to remove the sac entire, whatever its character might prove to be.

The patient was very anxious to have the operation performed, and she entered my private hospital for that purpose.

Operation.—On June 18th, assisted by Drs. J. Milton Miller, H. M. Christian, and J. D. Nutt, in the presence of Drs. J. F. Wilson, De Forest Willard, Latta, Day, and others, I proceeded to operate.

An incision three inches and a half in length was made in the median line below the umbilicus, and the tumor at once exposed to view. It was entirely free from adhesions everywhere, except at its lower portion. It presented a smooth, nacreous, glistening appearance, and resembled so much, at first sight, a thick-walled ovarian cyst that I, for a moment, questioned the correctness of the diagnosis. On closer examination, however, it was found to be more vascular and deeper in color. An effort was next made to find a pedicle with the view of ligating it, but this could not be done as the tumor was found to have a broad base which dipped into the pelvic cavity and which appeared to be firmly adherent in that position. It was then deemed best to endeavor to reduce the size of the mass by evacuating the fluid contents of the tumor, and for this purpose I plunged the aspirator trocar into the sac. Its contents appeared to be almost solid, and nothing flowed through the canula. The instrument was now withdrawn, and at once pus began to flow from the puncture. An incision was then made into the sac, when pus flowed freely and continued until at least a quart was discharged. It was not fetid. I next introduced my finger and found a child filling the sac. The incision in the wall of the tumor was now increased to about three inches in length when several fingers were introduced. The child was fixed in the lower portion of the sac by its breech, which presented at the superior strait, with the back to the right side. The head was in the upper portion of the sac, the entire fœtal ellipse being sharply flexed upon its anterior plane. I endeavored to make version and deliver by the feet, but the fœtal mass was so fixed that it could not be moved without undue force. While making this manipulation the hands and arms escaped from the incision and I then endeavored to deliver by traction upon the head, which partly collapsed, the parietal bones slipping off. When the head was delivered, it was discovered that the breech and

back were firmly adherent to the lower and outer surface of the cyst wall. They were finally separated and the child removed, a portion of the skin and superficial fascia remaining attached to the gestation sac. It was necessary to clamp many bleeding vessels in the cyst wall.

The cyst cavity was now cleansed of blood and débris. The umbilical cord was attached to the posterior and right side of the pelvis, below the superior strait, where its atrophied vessels branched off in different directions. I could not find a placenta, but the cord was firmly attached. The placenta was doubtless likewise atrophied.

I now again passed my hand over the external surface of the collapsed gestation sac with the view of possibly being able to remove it, but it was found certainly to have a broad base which dipped into the pelvis, apparently spreading out in the direction of the uterus; the latter organ being loosely connected with the tumor. In addition it seemed to be firmly attached to the deep pelvic vessels. I determined, therefore, that it would not be safe to attempt its removal. The sac undoubtedly contained muscular tissue. Examining now carefully, the left ovary and tube were located to the left and deep in the pelvis; the right ovary and tube were not found. As I could not remove it, I decided that it would be safer to stitch the cyst wall to the abdominal incision. This was done by first passing the needle through the cyst wall and then through the abdominal wall, thereby coaptating the incised edges of the sac and, at the same time, bringing its outer or peritoneal covering in contact with the peritoneal surface of the abdominal wall. The cord was brought out at the lower angle of the incision and a drainage tube placed alongside of it. The wound was dressed with salicylated cotton, supported by adhesive plaster and a flannel binder, and the patient returned to bed one hour and fifteen minutes after the operation was commenced. The child was a full-term male and weighed, in this macerated condition, seven pounds.

There was not the slightest evidence of shock during the operation, and but little hemorrhage. When the patient was returned to bed her pulse was 104 and temperature normal. She soon recovered from the ether and asked about the result of the operation. During the next twenty-four hours she complained of

considerable pain, for which hypodermic injections of morphia were administered.

There is very little to record regarding the temperature and pulse in the after-history of the patient. She was practically convalescent from the beginning. Her temperature did not rise above 100°, and her pulse was never more than 112, usually about 100, until about the tenth day, when both temperature and pulse were normal. Her bowels were moved on the fifth day and she was permitted to take solid food in small quantity from that time on. The drainage tube was watched with considerable solicitude as was also the healing of the wound, and it is sufficient to state that the latter did not differ in any particular from the healing of the ordinary abdominal incision, as union occurred by first intention.

At 7 P. M. on the evening of the day of operation, about a tablespoonful of sweet, bloody serum had been discharged from the tube.

June 19 (twenty-four hours after the operation). The notes state that the patient passed a good night, and that she felt better than at any time for weeks. The pain and backache are gone and she feels strong. She is bright and cheerful. No blood and very little serum from the drainage tube.

20th. Passed a good night; slept well. Passed flatus. No discharge from the tube. No tenderness on pressure anywhere. In the afternoon of this date it is noted that the entire dressing was changed for the purpose of examining more carefully as to the condition of the cord and also to learn whether there might be any difficulty along the line of the incision. There was not the slightest odor and no more staining of the cotton than after an ordinary laparotomy. The cord was undergoing further atrophy, but was still attached. About a drachm of serous fluid was drawn from the bottom of the drainage tube. A little carbolized water was introduced from the sponge, but returned unstained. The wound was covered with iodoform and the dressing replaced. Patient seems bright and well.

22d. Drew a quantity of fluid from the bottom of the sac. It is thicker and lighter in color than yesterday.

24th. Patient felt bright and well. Sutures were all removed except three or four immediately around the drainage tube.

Union seemed to be perfect, and there was not the slightest sign of pus or odor.

26th. The glass drainage tube was removed and a small rubber tube substituted. Removed the remainder of the sutures; union perfect and solid Cord separated about an inch from the opening. There has not been the slightest tenderness on pressure or tympanites since the operation.

27th. There was a slight discharge of healthy pus when the patient occupied the lateral position; ordered to remain in that position as much as possible.

28th. Dressed wound; very little pus, and that perfectly sweet. The incision had closed around the orifice of the tube track and the patient seemed not quite so well; a little feverish. I therefore passed a probe and found that the track extended deeply into the pelvis, but there was no further discharge. A small plug of lint was introduced and left in the orifice.

29th. Temperature normal; pulse 94. Removed a few drops of healthy pus.

From this date there was quite a free discharge of a seropurulent, but perfectly sweet fluid, which continued in diminishing amount.

July 3. At this date there was considerable odor present for the first time since the operation. Irrigation with carbolized solution. In the evening of this date, temperature 100°; pulse 90. The abdomen a little tympanitic; no pain or tenderness. Vaginal examination made; first since the operation. The uterus was found a little to the left, as it was prior to the operation and perfectly mobile. There was no induration, and I could scarcely distinguish the remains of the sac. But I did not examine very thoroughly for it.

4th. During the night the tube became clogged. Temperature and pulse a little higher than yesterday. Temperature 99⅖°, pulse 100. Slight diarrhœa and evidence of digestive disturbance.

6th. Very little discharge from the tube. Sat up for the first time and felt strong and well. Did not want to return to bed.

16th. She went home (two hundred miles) on the twenty-eighth day after the operation.

The patient has remained well; yet, although three and a half years have now elapsed, there is still a small fistulous opening at the lower end of the incision. At each recurring menstrual period there was, for more than two years, a discharge of blood through the fistula, menstruation at the same time occurring in the natural manner from the womb. No pain or inconvenience was felt from this discharge of blood; on the contrary the patient was always relieved; and it was determined by the patient as well as her physician that the discharge from the fistula was of the ordinary menstrual character. It would continue during the period and disappear as the flow disappeared from the natural channel.

The following letter, dated December 8, 1888, will explain the patient's present condition:

"DEAR DR.: Mrs. O. says you wish to know how she is at the present time. There is still a fistulous opening, and although her menses do not now come that way, there is still a watery substance discharged. Her general health is first class. There is an abdominal hernia in the line of the incision.

"Yours very truly,

(Signed.) "J. D. NUTT."

At the time this patient came under my care I did not know of a single recorded case of pregnancy, which had reached term, in one horn of a uterus bicornis, and was not aware that any such existed. It was at that time the general belief among observers that the cases which had been described by the older writers as "missed-labor" (Oldham) were really examples of extra-uterine gestation; probably of the secondary abdominal variety. But the history and physical signs of this case removed it from that category, and I was therefore greatly perplexed as to the true character of the gestation. It was mainly for this reason that I did not at once report the case. More than a year after the operation and while I was still looking among the literature on extra-uterine pregnancy for a similar case, I happened upon the very interesting and in-

structive paper by the late Dr. Angus Macdonald, entitled, "Report of a case of pregnancy in the left horn of a bifurcated uterus," etc., which had been published in the *Edinburgh Medical Journal* for April, 1885. It now at once became clear to me that my case was of similar character.

In addition to his own case, Macdonald gives a brief account of two others, one by Litzman, of Berlin, the other by Salin, of Stockholm, and refers to one by Sänger. There also had been at that time a fourth case recorded, that of Wiener (*Archiv f. Gynäk.*, Bd. xxvi., heft 2, Greig Smith), but it had escaped Macdonald's notice. These fives cases, with my own, the sixth, include all the recorded operations, so far as I have been able to learn, for this rare condition; mine being the only one in America. It is worthy of note that they all occurred within a period of five years, and that each operator was unaware of the work of the others; and furthermore, that in not one of the cases was the condition fully understood. Macdonald, indeed, thought he was operating for fibroid tumor of the uterus, and did not discover his error until he was severing the pedicle, when a limb of the child escaped.

In Litzman's case, the first (February 14, 1880), "The diagnosis was retention of a mature putrid fœtus inside the uterus." The Porro-Muller operation was performed, but the patient died on the third day, from previously existing septicæmia, when the true condition was learned at the autopsy. The left horn with its corresponding tube and ovary was found within the pelvic cavity; the right had been removed with the gestation sac. It was therefore the right horn of a uterus bicornis which had been impregnated.

Salin was the second operator (June 17, 1880), but he did not, I believe, fully report his case until 1885 (*Hygiea*, 1885; translated by J. G. Tapper, M.D., Elgin, Illinois., *Annals of Gynecology*, Boston, September, 1888). He says, in speaking of the difficulty of diagnosis in his case, the symptoms of which had been much like mine:

"We had naturally, first of all, to suspect an extra-uterine pregnancy. Against this diagnosis were many convincing circumstances. The patient's general condition was very good. She had certainly lost in weight, yet still was quite plump, and could, without great suffering, remain about, a very great contrast to what many suffer in extra-uterine pregnancy. The fœtal tumor in an extra-uterine gravidity generally appears unsymmetrical in form, although these irregularities are difficult to outline with certainty; as nothing but the abdominal walls and the thin fœtal sac cover the fœtus, it is usually very easy to palpate. In this instance the tumor was perfectly symmetrical and round. Not a trace of the child, or any unevenness, could be detected in any part. . . . . Instead of the uterus being enlarged, as in extra-uterine gestation, it was here comparable to a normal virgin uterus. It was not closely applied to the tumor, but was distant and freely movable, by the side of which the hand could discover a pediculated structure passing from the uterus to the tumor. The decidua had passed away. Against the supposition of a new formation stand prominent before all else the patient's own feelings. It is undoubtedly true that women, during the period of active growth of abdominal tumors, frequently deceive themselves by suspecting pregnancy, and thus call forth these ordinary complex symptoms. The patient so clearly described her condition, in such a trustworthy manner, that we were compelled to give them credence; and added to this was the testimony of the husband, who informed us that he had distinctly felt fœtal movements, which confirmed her statements. Without these facts the enlargement of the mammæ, with secretion of milk on pressure, as well as the appearance of fresh, red colored striæ upon the belly, which do not generally appear without pregnancy, all spoke strongly. We were thus in doubt and could not establish a correct diagnosis, but our suspicions inclined mostly toward an extra-uterine pregnancy. . . . . The ordinary abdominal incision was made. During the time we were inspecting the tumor there oozed out through an opening, the size of a pinhole, in the wall of the tumor, a dirty-yellow fluid. Supposing the contents of the tumor to be of the same nature, a large ovarian trocar was introduced, but no fluid flowed out. On withdrawing the trocar a fœtal part presented itself. The opening in the wall

of the tumor was then enlarged both in an inward and downward direction. . . . . We afterward endeavored to bring the tumor outside of the abdomen, which was very easily accomplished. To our astonishment we then found a ligamentum latum, with a normal tube and ovary, springing from the right side of the tumor. We had, therefore, to deal with a double uterus, of which one-half was gravid, while the other, as we had previously determined by examination, was of normal size. Both were united by means of a short, broad, yet not particularly thick, peduncle."

The pedicle in this case was treated after Schröder's method of dealing with the pedicle in hysterectomy, and dropped. The patient recovered. He continues:

"The placenta was completely adherent upon the inside of the sac, and from the walls the membrane hung in necrotic folds. Tube and ovary were both normal. . . . . Our supposition was consequently incorrect. It was certainly a case of gestation, but not extra-uterine, as supposed, but intra-uterine."

I have quoted thus at length from Salin's record to show the close resemblance which his case sustained to my own. It is almost identical, except in the method of operating. The same, with slight qualification, may be said of the others. Unlike the other operators, I failed to remove the gestation sac, although, as stated, I had hoped, in view of the transverse mobility of the upper portion of the tumor, to be able to do so. As soon as the abdomen had been opened an effort was made to find a pedicle, but the broad base of the tumor dipped deeply into the pelvis, where it was firmly fixed. A further attempt was made to remove the sac after it had been emptied, but it did not seem safe to continue the effort, since it was in such close contact with the deep pelvic vessels. Then the deep pelvic attachment of the placenta and cord led me finally to decide in favor of finishing the operation as described.

Although I did not at the time of the operation exactly

understand the character of the sac, I fully realized that it was an unfortunate circumstance which compelled me to leave it; but I do not think I could have done otherwise had I known its true character. Removal of the gestation sac, where it is possible, greatly simplifies the operation and doubtless renders the recovery of the patient more certain and her subsequent condition safer. The recovery of my patient, however, could not have been more rapid, nor her general health better since the operation. True, she has had the annoyance of a permanent fistula, but this must be looked upon as a safety valve, since it gives exit to the menstrual and other discharges from this, now otherwise closed, uterine horn.

I further regarded it as unfortunate that I felt compelled to stitch this rather thick-walled sac to the abdominal incision, but believe that it was the best that could have been done in the case. Even had I fully known the character of the tissue with which I was dealing, it would not have been proper to close the incision in this imperfectly developed uterine horn, as after the regular Cæsarean operation, since there was now no opening from its cavity into the cervical canal.

It is probable that the hernia which now exists in the line of the incision has resulted from a failure of that perfect adjustment of the peritoneal surfaces which is necessary to its firm union. The peritoneal surfaces on either side of the incision were not coaptated at all, the one with the other, but each side was first brought in close relation and contact with the peritoneal surface of the cyst wall.

The course and termination of pregnancy in the rudimentary horn of a bicornate uterus are probably the same, in nearly all cases, as in the ordinary tubal form of extra-uterine gestation, viz., rupture of the sack during the early months of pregnancy. The time of rupture, however, usually is not as early as where it is of purely tubal character, nor the symptoms of extra-uterine pregnancy so marked as in the ordinary tubal variety. The signs are more likely to be those

of normal pregnancy, and the danger therefore masked; the symptoms of rupture being the first evidence of the existence of an abnormality in the gestation. This view is supported by the result of Kussmaul's investigations. "Kussmaul has subjected this form of gestation to minute critical and anatomical analysis, and proves that it has often been mistaken for tubal gestation. . . . . The thirteen cases collected by him all terminated by rupture of the fruit-sac and death. The period of rupture varied from the fourth to the sixth month, the greater number bursting in the fifth month." (Barnes' *Diseases of Women*, second edition, pages 328 and 329.) The cases forming the subject of Kussmaul's analysis were mostly collected from records covering a period of two hundred years, the first one being taken from Dionis (1681).

In a few cases the gestation proceeds to full term, when fruitless efforts at expulsion of the product supervene, and the child dies. These efforts may now result in rupture of the sac and the death of the patient. This is probably the usual termination, but in rare instances the sac is strong enough to withstand the strain of the false labor. Formerly the condition was then unfortunately regarded as one of "missed-labor," and the patient "left to nature." The retained product now soon began to undergo disintegration and decomposition and to ulcerate its way out, in most instances destroying the patient by septic absorption during the process. It is true that there are, here and there, scattered through the literature of many centuries, a few cases recorded where such changes have taken place in the retained product as to render it inert, the patient enjoying good health throughout the remainder of her life. A few have also recovered after the product has undergone decomposition and been discharged by various channels, through the abdominal wall, bowel, etc.

Strange to say, until recently, the few instances of recovery had been permitted to establish the practice of non-interference in these cases. "Missed-labor," that is, the retention of a

matured fœtus within a normal uterine cavity far beyond the full term of normal gestation, probably never occurs. The term was unfortunate and the definition misleading. I fully agree with Macdonald in his view of the question, as expressed in the paper referred to above. He says: "It is, doubtless, difficult to understand how such a phenomenon could arise. It is quite foreign to the experience of obstetricians in dealing with difficult and laborious cases to find that the uterine pains should come and go, and the uterus quietly subside again into inactivity without further immediate results. The all but universal experience is, that either the uterus ruptures itself, or, becoming inflamed, the patient dies of exhaustion along with her unborn child."

The only question which is worthy of consideration regarding the treatment of these cases is: When should the proper operation for their relief (laparotomy) be performed? To which the answer should be prompt in forthcoming: As soon as the abnormal condition is recognized, unless this should happily occur before the death of the child and before it is viable, in which case an effort should be made to save its life also, by waiting, if possible, until near the full term. But if symptoms of rupture of the sac, or of death of the embryo or fœtus supervene; or if the condition of the patient should be otherwise one of gravity, as a result of the ectopic pregnancy, valuable time should not be lost in the consideration of less radical remedies. The laws of physiology and pathology teach, and experience has now abundantly proved, that the patient is safe only ofter the product of an extra-uterine gestation has been entirely removed by laparotomy. This applies with greater emphasis, if possible, where the pregnancy exists in the rudimentary horn of a bicornate uterus.